

ARRANGEMENT, NETWORK AND METHOD FOR REDUCING NON-LINEARITY WITHIN ACTIVE RESISTOR NETWORKS

Abstract

A compensation arrangement is provided for reducing non-linearity in an active resistor network. A first FET (220) having a non-linear response is provided as an active resistor, and a second FET (240) having a non-linear response is coupled to the first FET (220). The non-linear response of the second FET (240) is adapted in order to compensate for the non-linear response of the first FET (220). The two FETs (220, 240) are complementary, and are selected to achieve the desired overall resistance value of the network. In this way the arrangement substantially reduces non-linear performance with an applied voltage, and is well suited for high frequency applications.